/455 cont./

396 one man or another will build a canoe. If he has observed that the vessel he built only the previous spring will hardly last out the winter, he sets about early enough, that is, in the fall, to make a new one. He does not take great pains with it, since the bark is not as good in the fall and in any case he will commence a new and better one in the spring. This is the only explanation for Bridges' assertion (i):23 that "the canoes are made twice a year in the spring and autumn. The former are called hákua, the latter Een-ánan [better kísajánan] i.e. Winter Canoe. The natives are specially careful to make the latter well" /cited in English/. Spring is actually the time when the great majority of families make a new vessel (p. 115).

•504 /456/ Through the years every man acquires some skill in this work, but this fact alone does not prevent him from treating his canoe most carefully and giving it his utmost attention. If he should lose it in the course of the year, he and his family would be in serious difficulty, sometimes in danger of starving. Heavy blows against rocks and tree trunks are particularly damaging because the bark sections break or tear. Rubbing against pebbles and sand soon causes the bottom and the threads of the seam to be scraped through. For this reason, the vessel is often kept in the open channel after the family has been brought to shore by the woman. Wherever the gently sloping beach permits, they make a sort of toboggan slide of damp Macrocystis algae over which they drag the canoe and upon which it rests. When boarding the canoe, everyone places his foot very carefully; in fact, everyone avoids any jolt and violent movement, for the seams easily burst and the seam threads become more brittle the older they are. In loading and unloading large objects are handled gently and cautiously.

422 462 Even though the man makes the canoe almost entirely by himself, it is not regarded as his property; the woman uses it and takes care of it. The man gives it to her, and it actually belongs to her or to the entire family. All the duties during the trip, as well as before and after, are her responsibility. She 482 502 alone paddles. Squatting in the rear third of the vessel, close against the right side, she grasps the oar shaft with both hands, the left above the right, and pushes the oar diagonally backwards

/459 cont./

396 thus permanently widened the upper half. Once the tree trunk was hollowed out and closed off at the stern, no further additions were required and it could be put to use immediately. The na-
[372] tives had to be content with a small fire which they kept going throughout the trip in a square tin can.

501 Compared with the bark canoe, however, which had served
504 the Yamana for centuries as their sole means of transportation, the modern dugout had many disadvantages. It capsized much more easily because it was not resilient and did not yield in any way, and because it was at least a quarter shallower than the bark canoe. Besides that, it could be moved on land only with great difficulty. True, the natives also made a sort of toboggan slide for it out of fresh algae, tuwĕtĕ̆ka, over which it was hauled up and down. In spite of that, all the members of the family had to exert themselves to the utmost, otherwise they could not budge it. The wood of the /460/ Antarctic beech is heavy. Finally, the dugout could almost never be anchored in the open channel when the rocky coast did not permit its being hauled up. It was too heavy and too slippery to become entangled in a mass of floating Macrocystis. Ropes made of bundles of rushes (Fig. 31) are too weak to keep the boat tied up near the coast. If, in spite of this, it could be left out in the water, the natives could almost always expect it to overturn (154). Righting it again

154. Lothrop (b):146 says of the dugout which he took back to New York, "it was the most unstable vessel in which the writer has ever set foot" /cited in English/.

required great effort on the part of the woman, and bailing it out took considerable time.

501 In most recent times the natives have improved the dugout very much by elevating the gunwale slightly all the way around with a strip of wood nailed or sewed on. This afforded greater safety on the trip, but also added considerably to the weight of the whole thing.

Undeniably the dugout is more durable, but in contrast to this one advantage there are great drawbacks. Hence it is not surprising that after a few attempts the families of those days

3: Lothrop E-5 (1924-1925) 1928
SH6 Yahgan SH6

FIG. 77.—Yahgan grass rope. Diameter of coil, 5¼ in. (14/2349)

As a result of the exercise, the women were very strongly developed above the waist, but poorly developed in the legs.

When it was desired to make a landing the canoe was paddled in to the beach, bow-on, and the man of the family and the children stepped ashore. The wife then paddled the canoe out to a piece of kelp, moored it, and swam ashore. As a result all the women were able to swim, while few of the men could do so.

The canoe was kept in the water habitually, because hauling it up on the beach was difficult owing to the fragility of the bark. When it was necessary to make repairs, the beach was carpeted with wet kelp to make a soft and slippery surface over which the canoe could be dragged with ease. The dugout canoes, however, were a different proposition, so for them runways were made by removing the stones (pl. XI). Stakes were driven at the head of the runways to which the canoes were tied. Campsites used habitually since the invention of the dugout may be distinguished by the presence of such runways.

FIG. 78.—Yahgan bark bailer. (After Hyades and Deniker.)

## WEAPONS AND METHODS OF HUNTING

### SPEARS

Yahgan weapons were the spear, club, sling, and bow. In their fashion of living, spears were almost as import-

3: Lothrop E-5 (1924-1925) 1928
SH6 Yahgan SH6



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PORTO PIEDRA

PUERTO MEJILLONES

CANOE RUNWAYS, NAVARIN ISLAND

[p. 148-A]